

REMARKS

The Office Action dated February 20, 2009 was received and carefully reviewed.

By this response, claim 6 is hereby amended to clarify the invention, and not for reasons of patentability. Claims 2-4, 7, and 9 are hereby canceled without prejudice or disclaimer. New claims 14-32 have been added, and do not include new matter. Claims 1, 5, 8, and 10-13 were canceled without prejudice or disclaimer by a previous reply. Accordingly, claims 6 and 14-32 are currently pending in the subject application.

Support for the amendment to claim 6 can be seen at least at page 2, lines 8-11, page 2, lines 27-29, page 3, lines 13-28, and FIG. 1B of the specification as originally filed. Support for new claims 14-32 can be seen at least at page 2, lines 8-11, page 2, lines 27-20, page 3, lines 13-18, and page 14, line 30 to page 15, line 1. Accordingly, Applicants contend that these claims do not include new matter.

Request and reconsideration of the subject application is respectfully requested in view of the above amendments and the remarks set forth below.

Priority

The Examiner alleges that Applicants have not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120, 121 because certain limitations recited in claim 6 are allegedly not disclosed in the prior application.

While Applicants do not agree with the Examiner's arguments that claim 6 is not entitled to the benefit of the prior application, Applicants contend that the amendments to independent claim 6 are clearly supported by the priority document, and thus should be afforded the benefit of the filing date of the priority application.

Claim Rejections - 35 U.S.C. § 112

Claims 2-4, 6, 7, and 9 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. However, amendment to claim 6, and the cancellation of claims 2-4, 7, and 9 render this rejection moot. Accordingly, Applicants respectfully request the withdrawal of this rejection.

Claim 2 stands rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. However, claim 2 has been canceled, thereby rendering this rejection moot. Accordingly, Applicants respectfully request the withdrawal of this rejection.

Claim Rejections - 35 U.S.C. § 102

Claims 2-4, 6, 7, and 9 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Joo et al. (U.S. Patent No.: 6,097,037) (*Joo*, hereinafter). Claims 2-4, 6, 7, and 9 also stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Hideaki Oka (JP 02-140915) (*Hideaki*, hereinafter). Applicants traverse these rejections for at least the reasons set forth below.

As a preliminary matter, claims 2-4, 7, and 9 have been canceled, thereby rendering their rejections moot.

Turning now to present independent claim 6, Applicants respectfully submit that the amendments to claim 6, which are supported by the priority application, and thus have an earlier effective filing date than that of *Joo*. Consequently, *Joo* does not constitute prior art, and the rejection of independent claim 6 should be withdrawn.

Turning now to the Examiner's rejection of independent claim 6 as allegedly being anticipated by *Hideaki*, Applicants respectfully submit that independent claim 6, and the claims dependent therefrom, are patentably distinguishable over *Hideaki*, since *Hideaki* fails to disclose, teach, or suggest all of the features recited in the pending claims. For example, independent claim 6 (emphasis added) recites:

6. A transistor comprising:
a channel region; and
at least one of a source region and a drain region having a
first crystalline portion adjacent to the channel region and a second
crystalline portion adjacent to the first crystalline portion,
**wherein the second crystalline portion is a region where a
metal was directly added, and**
**wherein the first crystalline portion is a region where
crystallization advanced from the second crystalline portion.**

Thus, present independent claim 6 is directed to, *inter alia*, the features of at least one of a source region and a drain region having a first crystalline portion adjacent to the channel region and a second crystalline portion adjacent to the first crystalline portion, wherein the second crystalline portion is a region where a metal was directly added, and wherein the first crystalline portion is a region where crystallization advanced from the second crystalline portion.

Applicants respectfully submit that *Hideaki* fails to disclose, teach, or suggest at least the features of at least one of a source region and a drain region having a first crystalline portion adjacent to the channel region and a second crystalline portion adjacent to the first crystalline portion, wherein the second crystalline portion is a region where a metal was directly added, and wherein the first crystalline portion is a region where crystallization advanced from the second crystalline portion, as recited in present independent claim 6.

Hideaki discloses a method for forming a semiconductor device including an insulating substrate 201 on which is formed an amorphous layer 202, such as silicon (see *Hideaki*, e.g., page 9 of the full English translation provided by the Examiner, and FIG. 2b). Additionally, *Hideaki* discloses that a metal layer 203 is formed on the amorphous layer 202, and that the metal layer is removed in certain portions leaving sections which will become seed regions 204 (see *Hideaki*, e.g., page 10 of the full English translation provided by the Examiner, and FIG. 2b). Further, *Hideaki* discloses that the amorphous layer 202 is patterned into a desired form and that a heat treatment is applied and crystal growth can be selectively induced from the seed regions (see *Hideaki*, e.g., page 10 of the full English translation provided by the Examiner, and FIG. 2b). Furthermore, *Hideaki* discloses that the amorphous layer 202 can be patterned to form island regions 205 and connecting regions 206, which connect the island regions 205 to the seed regions 204 (see *Hideaki*, e.g., page 11 of the full English translation provided by the Examiner, and FIG. 3b). In addition, *Hideaki* discloses that by patterning the amorphous layer 202 to include island regions 205 and connecting regions 206, even when multiple crystal nuclei are formed in the seed regions, any of the connecting regions 206, which are superior, are selected for fast crystal growth, and the island regions are monocrystallized (see *Hideaki*, e.g., page 11 of the full English translation provided by the Examiner, and FIG. 3c).

As seen below, FIGS. 2b and 2c of *Hideaki* show that a source or drain region is not used as the seed region, as in the present invention. To the contrary, the seed region of *Hideaki* is merely an amorphous layer 202 on which a metal layer 204 is formed.



Figure 2 (b)

Key: 203 Metal layer
204 Seed region

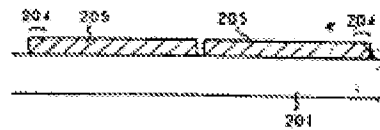


Figure 2 (c)

Furthermore, contrary to the present invention, *Hideaki* discloses the island region 205 is monocrystallized, and fails to disclose a source or drain region having a first crystalline portion adjacent to the channel region and a second crystalline portion adjacent to the first crystalline portion, as in the present invention.

For at least the reasons stated above, *Hideaki* fails to anticipate each and every feature recite in independent claim 6. Accordingly, Applicants respectfully request the withdrawal of the rejection under 35 U.S.C. § 102(b), and the allowance of independent claim 6.

Claims 17-20 are allowable at least by virtue of their dependency from independent claim 6, but also because they are distinguishable over the prior art. Accordingly, Applicants respectfully request the allowance of these claims.

New claims 14-16 and 21-32 are also distinguishable over the prior art, and are in condition for allowance. Accordingly, Applicants respectfully request the allowance of these claims.

In view of the foregoing, it is submitted that the present application is in condition for

allowance and a notice to that effect is respectfully requested. If, however, the Examiner deems that any issue remains after considering this response, the Examiner is invited to contact the undersigned attorney/agent to expedite the prosecution and engage in a joint effort to work out a mutually satisfactory solution.

Except for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§ 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No. 19-2380. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully submitted,

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